

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-24(Canceled).

25 (Currently Amended): A diagnostic composition comprising an isolated polypeptide of claim 50 ~~comprising at least eight consecutive amino acids from the amino acid sequence of SEQ ID NO: 4, which polypeptide is isolatable from *Neisseria* bacteria~~, said polypeptide associated with a suitable detectable label.

Claims 26-29 (Canceled).

30 (Currently Amended): The composition according to claim 50~~24~~, wherein said composition comprises a second polypeptide or protein.

31 (Previously Presented): The composition according to claim 30, wherein said polypeptide is fused to said second polypeptide or protein.

32(Previously Presented): The composition according to claim 30, wherein said second polypeptide or protein is an antigen from a pathogenic species that is heterologous or homologous to *Neisseria gonorrhoeae* or *Neisseria meningitidis*.

33(Currently Amended): The composition according to claim 50~~24~~, comprising an adjuvant.

34(Currently Amended): The composition according to claim ~~50~~²¹, wherein said antibodies also recognize a protein in multiple *Neisseria gonorrhoeae* strains and *Neisseria meningitidis* strains, said protein ~~proteins~~ appearing as a reactive band ~~bands~~ of approximately 85 kD on a Western blot.

35(Previously Presented): The composition according to claim 34, wherein said *Neisseria meningitidis* strains are selected from the group consisting of *N. meningitidis* HH, *N. meningitidis* MP78, *N. meningitidis* MP3, and *N. meningitidis* MP81.

36(Previously Presented): The composition according to claim 34, wherein said *Neisseria gonorrhoeae* strains are selected from the group consisting of *N. gonhorroae* FA19, *N. gonhorroae* FA635, *N. gonhorroae* FA1090, *N. gonhorroae* JS1, *N. gonhorroae* MS11, and *N. gonhorroae* F62.

Claims 37-38(Canceled).

39(Previously Presented): The composition according to claim 25, wherein said polypeptide is associated with nitrocellulose paper or a latex bead.

40(Previously Presented): The composition according to claim 25, wherein said composition comprises a second polypeptide or protein.

41(Previously Presented): The composition according to claim 40, wherein said second polypeptide or protein is fused to said polypeptide.

42(Previously Presented): The composition according to claim 40, wherein said second polypeptide or protein is an antigen from a pathogenic species that is heterologous or homologous to *Neisseria gonorrhoeae* or *Neisseria meningitidis*.

43(Previously Presented): The composition according to claim 25, wherein said polypeptide lacks a signal sequence spanning amino acids 1-21 of said amino acid sequence of SEQ ID NO: 4.

44(Currently Amended): The composition according to claim 25, wherein said antibodies also recognize a protein in multiple *Neisseria gonorrhoeae* strains and *Neisseria meningitidis* strains, said ~~protein~~ proteins appearing as a reactive band ~~bands~~ of approximately 85 kD on a Western blot.

45(Previously Presented): The composition according to claim 44, wherein said *Neisseria meningitidis* strains are selected from the group consisting of *N. meningitidis* HH, *N. meningitidis* MP78, *N. meningitidis* MP3, and *N. meningitidis* MP81.

46(Previously Presented): The composition according to claim 44, wherein said *Neisseria gonorrhoeae* strains are selected from the group consisting of *N. gonorrhoeae* FA19, *N. gonorrhoeae* FA635, *N. gonorrhoeae* FA1090, *N. gonorrhoeae* JS1, *N. gonorrhoeae* MS11, and *N. gonorrhoeae* F62.

Claims 47-49(Canceled)

50(Currently Amended): An immunogenic composition comprising an isolated polypeptide comprising an amino acid sequence having 95% or greater sequence identity with the amino acid sequence of SEQ ID NO: 4, and a pharmaceutically acceptable carrier, wherein said polypeptide in said composition induces antibodies in a mammalian patient that bind to said amino acid sequence of SEQ ID NO: 4 ~~on the surface of said~~ *Neisseria* ~~bacteria~~ and that interfere with the ability of *Neisseria gonorrhoeae* ~~said~~ bacteria to adhere to mammalian epithelial cells in a gonococcal cell adherence assay.

51(Previously Presented): The composition according to claim 50, wherein said polypeptide lacks the signal peptide spanning amino acids 1-21 of said amino acid sequence of SEQ ID NO: 4.

52(Previously Presented): The composition according to claim 50, wherein said polypeptide contains one to four conservative amino acid replacements in the amino acid sequence of said amino acid sequence of SEQ ID NO: 4.

Claims 53-54(Canceled)